

Amendments to the Specification:

Please replace the paragraphs at page 1, from line 2 through line 5, with the following paragraph. Inserted text in the paragraph below is indicated by double underlining.

Related Disclosure Information

This application claims the benefit of U.S. Provisional Application No. 60/408,556, filed on September 6, 2002, the subject matter of which ~~The subject matter of the present application~~ is related to the disclosure document filed at the U.S. Patent and Trademark Office on September 7, 2000, and assigned Disclosure Document No. 479631.

Please replace the paragraph at page 1, from line 10 through line 22, with the following paragraph:

Viewing endoscopes permit remote treatment of internal locations within a patient by accessing those locations through a natural body lumen avoiding the need for surgery in some cases. The advantages of using an endoscope to treat internal maladies of the human body has led ~~lead~~ to the development of various endoscopic accessory treatment devices that can be fastened to the distal end of the endoscope to carry out mechanical manipulation and treatment of internal tissue areas. Examples of such endoscopic accessories include suturing devices, cutting instruments, band ligating devices and forceps, among others. The accessories are securable to various types of endoscopes specifically designed for specific areas of the body and include: laparoscopes, duodenoscopes, colonoscopes, sigmoidoscopes, bronchoscopes, and urethoscopes, among others. In combination with remote viewing capability, endoscopes are frequently configured to provide a working channel through which controls for the scope mounted accessory may be inserted for remote operation.

Please replace the paragraph at page 7, line 29 through page 8, line 11, with the following paragraph:

The wire 11 is then withdrawn proximally, followed by proximal withdrawal of the cable 10, to withdraw the needle 8 from the tissue portion 19a. The suction is then discontinued allowing the U-shaped tissue portion 19a to be released from the cavity 7. As shown in FIG. 3, the released tissue is left with a suture thread 14 passing through the two layers of tissue that form the U-shaped fold 19a. One end of the suture is joined to the tag 12 that remains captured in the chamber 20 and the other end of the suture extends through the patient's esophagus and out of the mouth. Finally, the endoscope and sewing ~~sewing~~ device are withdrawn from the patient. In so doing, the thread 14 is pulled partially through the tissue portion 19a, as the captured tag 12 is withdrawn proximally and brought outside the patient. With both ends of the thread 14 outside of the patient, the thread can be knotted and the knot endoscopically pushed down to the suture site and severed by an endoscopic knot pusher such as that disclosed in U.S. Pat. No. 6,010,515 (Swain et al).

Please replace the paragraph at page 9, line 28 through page 10, line 9, with the following paragraph:

Tissue portions are drawn into the suction ports and into the vacuum chambers by suction introduced to the chambers through air passages 88. The air passages are open to independent internal channels in the body that are joined to vacuum lines 90. The vacuum lines extend from the proximal end of the capsule body, external to the endoscope, to the proximal end of the scope. Outside the patient, the vacuum lines can be joined to a portable or institutional vacuum source (not shown). A control valve may be inserted in-line near the proximal end of the tubes for selective control of the vacuum by the user. The air passages of all chambers ~~chambers~~ may be joined and controlled by a

single vacuum line. Alternatively, as shown in FIG. 4C, separate vacuum lines may be used to supply suction to the air passages of different vacuum chambers. Use of separate vacuum lines permits independent control of suction provided to the several chambers by the use of separate control valves for each vacuum tube at their proximal ends.

Please replace the paragraph at page 11, line 21 through page 12, line 3, with the following paragraph:

The tissue apposition device 61 located at the distal end 59 of the endoscope is configured similarly to the device discussed in connection with FIGS. 1-3 ~~103~~ above. The apposition portion 61 comprises a vacuum chamber 63 into which aspirated tissue is collected in a plurality of suction ports 65 along ~~long~~ the bottom of the vacuum chamber 63 for introduction of vacuum to selectively capture tissue into the chamber. The vacuum chamber 63 may be formed from transparent polymer materials to improve visibility of the tissue as captured into the chamber and illumination provided by several light ports integrated into the endoscope. Shown in phantom in FIG. 5A is a needle pathway 67 along which the needle may be moved longitudinally through a captured tissue portion. Beneath the chamber, the endoscope continues distally and ~~an~~ terminates at distal face 91. At the distal tip of the apposition portion is provided a removable cap 69, which provides a chamber into which a suture carrying tag may be injected as discussed above in the operation of the prior art device of FIGS. 1-3.

Please replace the paragraph at page 13, line 22 through page 14, line 4, with the following paragraph:

Through the reduced diameter core portion 108 extend passages for conventional endoscope elements. A combination suction lumen and working channel 120 is provided to carry elongated ~~elongate~~ medical instruments. A telescoping and rotational objective lens 122 is provided as well as a fixed objective lens 124 for providing viewing capability

to the proximal end of the endoscope. A light guide 126 may be provided at the center of the reduced diameter portion 108 to illuminate areas viewed through the objective lenses. An air and water port 128 may be provided as a cleaning means for the objective lenses. Also provided is a side suction port 130 on the side wall of the reduced diameter portion 108 for communicating vacuum to the vacuum chamber 112 of the cylindrical cartridge. Also provided on the side wall 132 of the reduced diameter portion 108 are dual trigger mechanisms 134 (shown in phantom) that slide longitudinally to operate the tissue capture means release mechanism in the cylindrical cartridge.

Please replace the paragraph at page 14, line 24 through page 15, line 5, with the following paragraph:

The firing spring 151 is held in a compressed configuration by trigger 156 until delivery of the plug through a captured tissue portion as desired. The trigger can be pulled out of the way from the spring by a remote connection to the proximal end of the endoscope as will be explained below. When the spring is released, it expands along the circumferential pathway as ~~and~~ defined by the firing chamber 144 and pushes the plug 140 through the tissue. As the plug is fired, the plug body 146 becomes frictionally engaged in ring through hole 158. Shown best in FIGS. 10A and 10B, the ring through hole is not concentric with the outside diameter of the ring, but is located at one side of the ring to match the alignment of the offset plug body 146 relative to the plug head 150. Additionally, the through hole 158 is configured to taper gradually in diameter to a ridge 160 of reduced diameter in its center for the purpose of enhancing frictional engagement with the plug body 146.

Please replace the paragraph at page 18, line 26 through page 19, line 4, with the following paragraph:

The viewing and cleaning ports of the distal tip 240 of the device aid in navigating the endoscope to the intended tissue location by providing a viewing vantage point that is not obstructed by the structure of the apposition device. The viewing and cleaning ports 232 and 234 that terminate in the bottom of the vacuum chamber 242 are useful in observing when the complete tissue mound has been aspirated into the chamber. When a tissue mound is fully collected, it contacts the face of the viewing port 232 causing a "red-out" ~~"pink-out"~~ condition that verifies for the operator that a complete tissue portion has been aspirated and it is safe to deliver the needle carrying a suture through the tissue mound.

Please replace the paragraph at page 20, from line 22 through line 26, with the following paragraph:

Once grasped, the tissue mounds 138 may be injected with a bio absorbable bulking agent by a needle introduced through another channel of the endoscope. Alternatively, the tissue mounds may be retained by placement of a ligating band ~~of~~ on each tissue mound. The tissue mounds may be grasped through the access ports by other means such as a barbed harpoon, a snare loop or rollers.